

### **PRINCIPAL CIVIL ENGINEER**

**DEFINITION:** Under administrative direction, performs advanced professional engineering work of considerable depth and complexity; serves as an authoritative source on a wide range of policy and engineering related problems, where procedures and guidelines are non-existent and undefined; performs related work as assigned.

**ESSENTIAL FUNCTIONS:** This list is ILLUSTRATIVE ONLY and, is not a comprehensive listing of all functions and tasks performed by incumbents of this class.

#### **TASKS:**

Provides scientific expertise and policy advice on controversial engineering issues; provides expert testimony and technical review on major legal litigations on mineral and water rights, environmental and reclamation related engineering issues; addresses and reconciles a broad range of highly complex engineering problems; devises concrete approaches in planning, designing and resolving problems; applies professional registration seal to plans and specifications prepared.

Conducts studies with federal and state agencies aimed at developing uniform planning, financing, contracting, and management of engineering projects jointly; resolves and deals with highly controversial economic and public policy issues; finds solutions to critical problems in design, construction or operation; guides staff or field personnel specializing in various facets of the engineering problems.

Addresses and develops proposals to revise legislation, regulations or other control policies impacting engineering projects; prepares, explains and defends proposals before reviewing authorities; keeps officials of local jurisdiction informed of progress and/or changes; coordinates work efforts with other organizations and/or programs to ensure compatibility of engineering approach and for optimum results; performs all duties described at the next lower level.

#### **KNOWLEDGE, SKILLS AND OTHER CHARACTERISTICS:**

Extensive knowledge of the principles, practices and techniques applied in civil engineering to sufficiently address and reconcile complex engineering problems.

Knowledge in developing engineering plans, scope of work, and design specifications for large complex and/or multiple projects.

Knowledge of methods applied in coordinating, managing, scheduling and controlling multiple projects.

Knowledge of Navajo Nation, federal and state regulations governing civil engineering.

Knowledge and understanding of federal and state agency roles, goals, objectives and jurisdiction as they relate to joint management of engineering projects.

Knowledge and understanding of economics as related to planning, designing and construction practices.

Knowledge and application of engineering research and study methods.

Knowledge of computer hardware, software and peripherals.

Skill in establishing and maintaining effective working relationships.

Skill in recognizing and evaluating important engineering facts and problems.

Ability to resolve problems through advanced mathematical formulas and calculations.

Ability to plan and implement engineering projects.

Ability to communicate effectively, both orally and in writing.

**PHYSICAL REQUIREMENTS AND WORK ENVIRONMENT:** Work requires attention to detail with potential exposure to loud noises, dust, toxic chemicals and fumes when working on site.

**PRINCIPAL CIVIL ENGINEER**

**MINIMUM QUALIFICATIONS:**

- A Bachelor's degree in Civil Engineering or a related engineering field; and ten (10) years of professional civil engineering experience, six (6) years of which must have been in a supervisory capacity.

**PREFERRED QUALIFICATIONS:**

- A Master's degree in Civil Engineering or a related engineering field.

**SPECIAL REQUIREMENTS:**

- Possess a registration as a Professional Engineer (PE) in the State of Arizona, New Mexico or Utah.
- Possess a valid state driver's license.

**Supplemental Requirements:**

Incumbents must obtain a Navajo Nation Vehicle Operator's Permit within 90 days of date of hire.

Depending upon the needs of the Nation, some incumbents of the class may be required to demonstrate fluency in both the Navajo and English languages as a condition of employment.